March 31, 2010 1:04:16 PM

Required Date: 20/04/2010



Page 1

Item ID:

D205-634-041

Accept

Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

Start Oty: 1.00

Rea'd Otv: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

QC:

Date:

Date: 10-3-3/ Tooling:

Date: Date:

Stop

Start

Stop

Sequence ID/ Work Center ID Operation

Description

Set Up/ **Run Hours**

SPC (Y/N):

Draw Number

Draw Rev.

Plan Accent Code Qty

Reject **Qty**

Run

Reject Insp. Number Stamp

Draw Nbr

Revision Nbr

D2580 Rev D

100

Document Control

DOCUMENT CONTROL

Memo

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

0.00

0.00

110

CNC Bend 1

CNC Delta 100 Bender

BENDING MACHINE - SKIDTUBES

Memo

0.00

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

1410/4/21

B57285

Dart Aeı	rospace	Ltd											
W/O:	:			W	ORK ORDER C	HANGES					7 7		
DATE	STEP		PROCEDURE CHANGE					Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto		
											:		
Part No	·		PAR #:	Fault Cat	egory:	NC	R: Yes	No DQA:		_ Date: _			
	R	esolution:		Dispositi	on:	QA	: N/C CI	osed:		Date: _	4778		
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	CTED	Do	scription of NC		Corrective Action	Section B		Verificat	lion	Annessal	`A = = = = = = = = = = = = = = = = = = =		
DATE	STEP		Section A	Initial Chief Eng	Action Descr Chief Eng		Sign & Date	Section		Approval Chief Eng	Approval QC Inspecto		
į			1		·						-		
					s								
								.•					

March 31, 2010 1:04:16 PM

Required Date: 20/04/2010



Page 2

Item ID:

D205-634-041

Accept



Setup Start



Revision ID:

Replacement Skidtube Item Name:

Start Date:

31/03/2010

Start Qty: 1.00

Req'd Oty: 1.00



Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Process Plan: ____ Date: Tooling:

QC:

Operation

Description

Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Draw

Rev.

Plan

Code

Date:

Accept

Otv

Run

Stop

Reject

Number

Reject

Qty

Stop



Insp.

Stamp

Sequence ID/ Work Center ID

kidtubes •

Memo

Memo

0.00

0.00

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

4 10/4/21

130

Quality Control

QC5- Inspect part completeness to step on W/O

Dart Ae	rospace l	Ltd											
W/O:				WORK ORDER CHANGES									
DATE	STEP		PROCEDURE CHANGE					Ву		Date	te Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspect
							. •						
								¥.		÷			
								·					
Part No):		PAR #:	Fault Ca	ategory:		NCI	R: Yes	s No		Δ-	Date:	
	Resolution												
NCR:				RMANCE									
DATE		D	scription of NC		Corrective	Action	Section B			Vorifi	cation	Annuoval	A
DATE	STEP		Section A	Initial Chief Eng	Actio	on Descripti Chief Eng	on	Sign Dat			ion C	Approval Chief Eng	Approva QC Inspecto
													-
			``										
		 ,											
					3.								
				· .									

March 31. 2010 1:04:16 PM



Page 3

Item ID:

D205-634-041

Accept



Setup Start

Stop



Revision ID:

Item Name: Replacement Skidtube

Start Date:

31/03/2010

Start Otv: 1.00

Required Date: 20/04/2010 Reg'd Oty: 1.00



Cust Item ID: Customer:

Reference:

				1	
А	.DI)r	ov	ฆ	S:

Process Plan:

QC:

Date: _ ____

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

Stop

Sequence ID/ Work Center ID

140

Skidtubes Skidtubes

Operation Description

Set Un/ **Run Hours**

Draw Number

Draw Rev.

Plan Code

Accent **Qty**

Reject Oty

Reject Number Stamp

Insp.

Memo

0.00

0.00

1-Weld step D2576 as per Dwg. D2580 and OSI 004

Date: _____

A/R□□□ Aluminum Rod M113207 BE 10/04/23
30, QSI
3/8" drill

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R□□□ Aluminum Rod

m113201

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64". adjust stopper not to hit web.Deburr

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Deburr holes

6-Drill pilot holes for aft cap using DT 8215Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

Dart Ae	rospace Lt	d							• • •				
W/O:		******		W	ORK ORDER CHANGES	3		· · · · · · · · · · · · · · · · · · ·	۹, ۴				
DATE	STEP		PRO	OCEDURE CHA	NGE	Ву	Date Q	Approval Chief Eng / Prod Mgr	Approv QC Inspec				
Part No):		PAR #:	Fault Cate	gory:	NCR: Yes	No DQA: _	Date: _					
Resolution		lution:	Disposition: QA: N/C Closed: Date:										
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Dæ	scription of NC		Corrective Action Section B		Verification	n Approval	Approv				
DATE	SIEP		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C		QC inspec				
									-				
			·		<u> </u>								

March 31, 2010 1:04:16 PM



Page 4

Item ID:

D205-634-041

Accept

Setup Start

Stop

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

Start Otv: 1.00

Required Date: 20/04/2010 Reg'd Oty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: Date:

Tooling:

Date:

Rev.

Date:

Run Start

Reject

Qty



OC:

Date: _____

SPC (Y/N):

Set Un/

Run Hours

Draw

Number

Draw Plan

Code

Accept

Qty

Reject Number Stamp

Insp.

Work Center ID

150

Sequence ID/

QC

Quality Control

Operation Description

QC10- Inspect visual per OSI004- ground welds

66/29

Memo

QC5- Inspect part completeness to step on W/O

0.00

QC

170

160

Memo

Quality Control

HandFinish

Pressure Wash per QSI005 4.3

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

Dart Ae	erospace Ltd									•			
W/O:		·	WORK ORDER CHANGES										
DATE	STEP	PR	OCEDURE CHAI	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspect			
				•									
	·				:								
Dort No													
Part No		PAR #:											
<u>,</u>	Resolutio	on	Disposition	1:	Q <i>t</i>	Y: N/C CI	osed:		Date: _				
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	0.755	Description of NC		Corrective Action	Section B		Verific	ation	Approval	Annrove			
DATE	STEP	Section A	Initial Chief Eng	Action Descr Chief Eng	iption	Sign & Date	Section		Approval Chief Eng	Approva QC Inspect			
		1		;						_			
									*				
						1	1		1				

March 31, 2010 1:04:16 PM



Page 5

Item ID:

D205-634-041

Accept



Setup Start



Revision ID:

Replacement Skidtube Item Name:

Start Date:

31/03/2010

Start Oty: 1.00

Reg'd Qty: 1.00 **Required Date: 20/04/2010**



Date:

Cust Item ID: Customer:

Reference:

Approvals:

Process Plan:

OC:

Date:

Tooling:

SPC (Y/N):

Date:

Draw

Number

Run

Accept

Oty

Start Stop

Reject

Otv

Stop



Number Stamp

Insp.

Reject

Sequence ID/ Work Center ID

180

Powdercoat

Powder Coating

Operation Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

MI 14707

Memo

START TIME: OVEN TEMPERATURE:

FINISH TIME: 11:30m

OC

Quality Control

190

OC3- Inspect Part Finish

Memo

Set Un/ Run Hours

0.00

Date:

Draw

Rev.

Plan

Code

7 m-h 10/05/04

Dart Ae	rospace	Ltd							
W/O:				WO	RK ORDER CHANGES	S ·			, - ,
DATE	STEP		PRO	CEDURE CHAI	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approv QC Inspect
Part No):		PAR #:	Fault Cated	Jory:	NCR: Yes	No DQA:	Date:	
		esolutior	•		:				
NCR:				WORK ORDE					
DATE	OTED		escription of NC		Corrective Action Section	В	Verification	Approval	Approva
DATE	STEP		Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Section C	Chief Eng	QC Inspec
									-
			İ						
				·					
			·						
		·							

March 31, 2010 1:04:16 PM



Page 6

Item ID:

D205-634-041

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

Start Otv: 1.00

Required Date: 20/04/2010

Reg'd Oty: 1.00



Date:

Cust Item ID:

Customer:

Reference:

Approvals:	

OC:

Process Plan:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Start

Stop

Stop



Sequence ID/ Work Center ID

200

HandFinish

Hand Finishing

Operation Description

Set Un/ **Run Hours** Draw Number Draw Rev.

Plan Accept Code Oty

Reject **Qty**

Run

Reject Number Stamp

Insp.

Memo

0.00

0.00

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates A/R □□□ Sikaflex-291 □ Sikaflex expire date:

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per OSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive A/R □ □□ Sikaflex-291 □

Sikaflex expire date: 10/0 8

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Mit woloslos

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval Approval** DATE **STEP PROCEDURE CHANGE** By Qty Date Chief Eng / QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ___ Date: ___ Disposition: _____ QA: N/C Closed: ____ Date: ____ Resolution **WORK ORDER NON-CONFORMANCE (NCR)** NCR: **Corrective Action** Section B **Description of NC** Verification **Approval Approval** DATE **STEP** Sign & Initial **Action Description** Section A QC Inspector Section C Chief Eng Chief Eng Chief Eng Date

March 31, 2010 1:04:16 PM

Required Date: 20/04/2010



Page 7

Item ID:

D205-634-041

Accept



Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

Start Otv: 1.00

Req'd Oty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: _____ Date: Tooling:

Date: _____

SPC (Y/N):

0.00

Date:

Date:

Run Start



Stop

Stop

Sequence ID/ Work Center ID

210

Ouality Control

Operation Description

OC:

QC5- Inspect part completeness to step on W/O

Set Up/ **Run Hours**

Draw Number

Draw Rev.

Plan Accept Oty Code

Reject Qty

Reject Number Stamp

Insp.

Memo Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for

Foreign objects per OSI 024

220

Packaging Packaging

Packaging

Memo

0.00

0.00

Identify and pack for shipping as per PPPD205-634-041

Location:

PPP Rev: 4

230

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Dart Ae	erospace Li	td							• . •		
W/O:				WC	RK ORDER CHANGE	S			9 4		
DATE	STEP		PR	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approv QC Inspec			
Part No):		PAR #:	Fault Cateç	Jory:	NCR: Yes	No DQA:	Date: _			
	Resolution			Disposition	l:	QA: N/C Cld	osed:	Date: _			
NCR:			WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP		escription of NC		Corrective Action Section		Verification	tion Approval	Approv		
DATE	SIEP		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspec		
									-		
					•						
į											

•											
Picklist Print									*		Page 1
March 31, 2010 1:0	04:22 PM					•					Tage 1
Work Order ID: 57	7285				V 54	·- <u>-</u> -					1/
Parent Item: Da	205-634-041										10
Parent Item Name:	Replacemen	t Skidtube	·		1111 8181 1188	II ##311 61881 11 8 2 1 8 1	••	S	Start Date:	31/03/2010	Required Date: 20/04/2010
Comments:	IPP Rev:NC IPP Rev P IPP Rev. O IPP Rev:P		043 EC	verified by:DD EC	p 30□K	(J		1	Start Qty:	1.00	Required Qty: 1.00
D2580-1 205 Skidtube bent detail		Manufacture	d No			110	Each	6.0000	1.0000		
				Warehouse Location Main Warehouse		<u>Loc</u>	c Qty	Loc Code BS7	102	D 14	10/4/2(
!				LG			6				_
:				54541 56975 57028	•		2 2 2			-	_ _
D2576-3 Step (maching detail)		Manufacture	d No			140	Each	120.0000	1.0000		

Warehouse]
<u>Location</u>	
Main Warehouse	
LG	
 46661	
52215	

Warehouse Location	Loc Oty	Loc Code		
Main Warehouse				
LG	120			,)
46661	73		BF	10/04/23
52215	47		W 1_	10/0/1/23

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval DATE Approval STEP PROCEDURE CHANGE** By Qty Date Chief Eng / QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ___ Date: ___ Resolution ______ Disposition: _____ QA: N/C Closed: _____ Date: ____ **WORK ORDER NON-CONFORMANCE (NCR)** NCR: **Corrective Action** Section B **Description of NC** Verification **Approval Approval** DATE **STEP** Initial Sign & **Action Description** Section A Section C Chief Eng QC Inspector Chief Eng Chief Eng Date

Picklist Print

March 31, 2010 1:04:22 PM

Page 2

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Oty: 1.00

Required Qty: 1.00

D2579

Manufactured No

140

Each

306,0000 20,0000



Crossbolt Spacer

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
LG	306	
43988	4	
46434	4	
46956	2	
47797	9	
48272	2	
51314	71	
51315	30	
51525	4	
53780	3	·
54543	18	
56715	2	
56818	4	
57052	153	20 BF 10/04/23

March 31, 2010 1:04:22 PM

Shop Packet Print

Page 2

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval Approval** DATE **STEP** PROCEDURE CHANGE By Qty Chief Eng / **Date** QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ____ Date: ____ Resolution Disposition: _____ QA: N/C Closed: ____ Date: ____ **WORK ORDER NON-CONFORMANCE (NCR)** NCR: **Corrective Action** Section B Description of NC Verification **Approval Approval DATE STEP** Sign & Initial **Action Description** Section A QC Inspector Section C Chief Eng Chief Eng Chief Eng Date

Picklist Print

March 31, 2010 1:04:22 PM

Page 3

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09

SS Wearplates & Gaskets

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Qty: 1.00

Required Qty: 1.00

D2855

Manufactured

Purchased

No

No

200

Each

132.0000 1.0000



Cap

Warehouse Location	Loc Oty		Loc Code	
Main Warehouse				
FP6		1		
56613		1		
Main Warehouse				
ST026	13	1		10/05/04
50513		1		
50770		1		
51539 🗸	3	5		-1X- M-h
53791	9.	4		•
	200	Each	1,299.000 2.0000	

AN3-5A Bolt

> Warehouse Location Main Warehouse ST350 100188

> > 105057

1299 188 1111

Loc Qty

Loc Code

-2x M-h 10/05/04

Dart Ae	rospace Lt	td						
W/O:			WO	RK ORDER CHANGE	S			
DATE	STEP	PR	OCEDURE CHAI	IGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto
Part No		DAD #-	Fault Cates		NCD: You A	No. DOA:	Data	
i ait ite		olution:	PAR #: Pault Category: NCR: Yes No DQA: Date					
	nesc		· · · · · · · · · · · · · · · · · · ·	R NON-CONFORMA			Date: _	
NCR:	,							
DATE	STEP	Description of NC	Initial	Corrective Action Section Action Description	n B Sign &	Verification	Approval	Approva
	<u> </u>	Section A	Chief Eng	Chief Eng	Date	Section C	Chief Eng	QC Inspecto

Ρi	c١	di	eŧ	P	ri	n	4
T	СК		SI.	1	rı	п	

March 31, 2010 1:04:22 PM

Page 4

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N \Box 02.08.28 \Box FP was QC5 in Step 27; Added QC5 to Step $30\,\Box$ KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09

SS Wearplates & Gaskets

JLM

Start Date: 31/03/2010

Start Qty: 1.00

Required Date: 20/04/2010

Required Qty: 1.00

AN960JD10L

Purchased

No

No

200

Each

2,849.000 2.0000



Washer

Warehouse	Loc Qty	Z .	Loc Code	
Location				
Main Warehouse				
ST348	284	19		
101291	1	16		
105793	4	19		
110985	278	34		
	200	Each	886.0000	50.0000

ALS7-1032-130 Purchased

Insert



Warehouse Loc Otv Loc Code Location Main Warehouse ST282 108606 52 111529 130 111779 34 112772 11 113238 659

SOX M-2 10/08/04

Dart Ae	rospace Lt	d						
W/O:		, , , , , , , , , , , , , , , , , , , ,	WC	RK ORDER CHANGES	S			4 ·
DATE	STEP	PR	OCEDURE CHAI	NGE	Ву	Date Qt	Approval Chief Eng / Prod Mgr	Approva QC Inspecto
Part No):			gory:				
	Reso	lution:	Disposition	n:	QA: N/C C	losed:	Date: _	
NCR:			WORK ORDE	ER NON-CONFORMAN	CE (NCI	R)		
DATE	STEP	Description of NC		Corrective Action Section B		Verification	n Approval	Approva
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Date	& Section C	Chief Eng	QC Inspect
								-
								:

Picklist Print

March 31, 2010 1:04:22 PM

Page 5

Work Order ID: 57285

Parent Item Name:

D205-634-041

Replacement Skidtube

Comments:

Parent Item:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09

SS Wearplates & Gaskets

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Oty: 1.00

AN3C4A

Purchased

No

200

Each

889.0000 50.0000

BOLT

Warehouse Loc Otv Loc Code Location Main Warehouse

ST350 112314 13 112720 12 112724 3

112829 112991 2

113121 64 113226 227 113644 12 113749 1

200

114103 114108

500 Each

54

0.0000 50.0000

50 x m-l 10/05/04.

AN960C10L washer

NA 51149 C03322

No

Purchased

M114341

Dart Ae	rospace Ltd							,		
W/O:			WO	RK ORDER CHANG	ES			, ,		
DATE	STEP	PR	OCEDURE CHAI	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto		
Part No:		PAR #:	Fault Cate	jory:	_ NCR: Yes	No DQA:	Date: _			
Resolution		ion:				: N/C Closed: Date:				
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NCF	₹)				
DATE	STEP	Description of NC	of NC Corrective Action Se			Verification	1 Approval	Approva		
DAIL	JILI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto		
								-		
		:								
		,								
							,			
NOTE: D	ate & initial all en	tries					<u> </u>			

March 31, 2010 1:04:23 PM

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09

SS Wearplates & Gaskets

JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Qty: 1.00

D3566-13

Manufactured

Manufactured

No

200

Each

60.0000

1.0000



Gasket

Warehouse	Lo	c Qty	Loc Code		
Location					
Main Warehouse					14.
FP	·	60			<u> </u>
45717		1			
50265		1			
53461		58			12 M-
	200	Each	21.0000	1.0000	

D3566-5

Gasket

Warehouse Loc Qty Loc Code Location B 57526 Main Warehouse FP 36113 46186 51260 Main Warehouse

FP015 13 56829 13 Main Warehouse FP19 5 55335 5

Dart Ae	rospace Ltd	d						
W/O:			WC	RK ORDER CHANGES				*
DATE	STEP	PR	OCEDURE CHAI	NGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approv QC Inspec
Part No):	PAR #:	Fault Cate	gory: N	CR: Yes	No DQA :	Date: _	
	Resol	ution	Disposition	n:	A: N/C Clo	sed:	Date: _	
NCR:			WORK ORD	R NON-CONFORMANC	E (NCR)		
DATE	STEP	Description of NC		Corrective Action Section B		Verification	Approval	Approva
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspec
				. · ·				-
					·			

March 31, 2010 1:04:23 PM

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09

SS Wearplates & Gaskets

JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Qty: 1.00

Required Oty: 1.00

10/05/04 m-1

D3566-1

Manufactured

No

200

Each

29.0000

2.0000

Gasket

Warehouse	Loc Qty	Loc Code
<u>Location</u> Main Warehouse	B 57715	
FP	10	
46349	1	
51218	1	

52512 54480

51259 6

55011 Main Warehouse

56825

FP015

19

3

19 Each

1.0000

D3564-11

Wearshoe

Manufactured

No

Warehouse

Loc Otv

Loc Code

9.0000

Walthouse	Lot Viy	Luc Cuu
Location	0 0	_
Main Warehouse	B 5795?	
FP		
45823	I	
50112	1	
Main Warehouse		
FP19	7	
56834	7	

200

1	X	M
		_

Dart Ae	rospace L	td						•	
W/O:			WORK ORDER CHANGES						
DATE STEP		P	PROCEDURE CHANGE		Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto	
Part No):	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA:	Date: _		
Resolutio		olution:	Disposition	1:	QA: N/C CI	osed:	Date: _		
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCR)			
		Description of NC	Corrective Action		on B	Verification			
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approva QC Inspect	
								-	
!									
		·							

March 31, 2010 1:04:23 PM

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N \Box 02.08.28 \Box FP was QC5 in Step 27; Added QC5 to Step $30\,\Box$ KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09

SS Wearplates & Gaskets

JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Qty: 1.00

Required Qty: 1.00

D3564-13

Manufactured

Manufactured

No

No

200

Each

39.0000

1.0000

Wearshoe	

Warehouse Location	Loc Oty	Loc Code	:	
Main Warehouse				
FP	21			· · · · · · · · · · · · · · · · · · ·
45409	2			
46495	10			
56285 💉	9			= $h h$
Main Warehouse				
FP17	18			
56533	18			IX M-N
	200 Ea	ch 6.0000	1.0000	
				S

D3564-9

Wearshoe

Warehouse

55334

Loc Qty

Loc Code

Location Main Warehouse FP 44659

1x m / 10/05/04

Dart Ae	rospac	e Ltd									
W/O:				WC	RK ORDER CH	IANGES					35 19
DATE	STEP		PR	OCEDURE CHA	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approva QC Inspecto
						-					
Part No):		PAR #:	Fault Cate	gory:	NC	R: Yes	No DG	A:	Date: _	
	R	lesolutio	:	Disposition	n:	QA	: N/C CI	osed:		Date: _	
NCR:				WORK ORDE	R NON-CONF	ORMANCI	E (NCR	1)			
DATE	CTED		Pescription of NC	Corrective Action		Section B		Verification		Approval	Approva
DATE	STEP		Section A	Initial Chief Eng	Action Descri	ption	Sign & Date		tion C	Chief Eng	QC Inspect
											-
		,									

Picklist Print

March 31, 2010 1:04:23 PM

Page 9

Work Order ID: 57285

Parent Item:

D205-634-041



Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09

SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Otv: 1.00

D3564-5

Manufactured

Manufactured

No

No

200

Each

20.0000

1.0000

Wearshoe

Warehouse	Loc Qt	y <u>Loc Code</u>		
Location OFFSHORE	3 5772	G	1×	m-,2 - 10/05/04
FG		2		- whelpu
34806		2		10/03/09
Main Warehouse				
FP		18		
45824	,	1		_
55024	•	6		
55333		11		,
	200	Each 318.0000	16.0000	

Loc Code

D2594-3

O-Ring, 205 Skidtube

Warehouse	Loc Oty
Location	
Main Warehouse	
FP	318
51613	27
52562	13
55546	278

B58191

Dart	Aerospac	e Lto
W/O·		1

W/O:			- 400	W	ORK ORDER CHANG	GES			· · · · · · · · · · · · · · · · · · ·		1
DATE	STEP		PRO	PROCEDURE CHANGE			,	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	<u> </u>		PAR #:	Fault Cate	gory:	NCR: Y	es N	o DQ /	 \ :	Date:	
					n:						
NCR:				WORK ORD	ER NON-CONFORM	ANCE (N	CR)				u-
DATE	STEP	1	escription of NC	Corrective Action Section B			Sign &		ation	Approval	Approval
			Section A	Initial Chief Eng	Action Description Chief Eng		ate	Secti	on C	Chief Eng	QC Inspector
			÷								
										1	

Picklist Print

March 31, 2010 1:04:23 PM

Page 10

Work Order ID: 57285

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Oty: 1.00

D2594-1

Manufactured

No

200

Each

419.0000 16.0000



Plug, 205 Skidtube

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		
FP	419	
42221	16	
42807	92	
43884	3	
46435	2	
51527	9	
51757	6	
54008	1	
54643	15	
55002	275	

B57826

16x m-h 10/05/04

Dart Aerospace Ltd W/O: **WORK ORDER CHANGES Approval Approval** DATE **STEP** PROCEDURE CHANGE By **Date** Qty Chief Eng / Prod Mgr QC Inspector Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ____ Date: ____ _____ Disposition: _____ QA: N/C Closed: ____ Date: ____ Resolution: _

NCR:			WORK ORDER NON-CONFORMANCE (NCR)									
			escription of NC		Corrective Action Section	В	Verification					
DATE	STEP		Section A	Initial Chief Eng			Section C	Approval Chief Eng	Approval QC Inspector			
		Ì										
~												
									<u>.</u>			
				1	I	Į.	1	1				



	DESIG	N ALL	DRAWN BY	DART AEROSPACE LTD					
		可以	PH	HAWKESBURY, ONTARIO, CANADA					
	CHEC	KED	APPROVED	DRAWING NO. REV.	Đ				
				D2580 SHEET 1 OF	3				
	DATE			TITLE SCAL	E				
	07.0	02.27		205 SKIDTUBE ASSEMBLY NT	'n				
i	Α		96.09.16	NEW ISSUE					
ĺ	В		96.12.02	AS MANUFACTURED					
	С		98.08.26	REDRAWN, INCLUDED DEO 9094/9097					
	D		07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183					



QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	Х	D2580-045	SKIDTUBE ASSEMBLY
1	11	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	_1_	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130	INSERT
		or AKS7-1032-130	
		or AKS4-1032-130	
		or AELS-1032-130	
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	_ 2	AN960JD10L	WASHER

GENERAL NOTES:

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

2) **ALL DIMENSIONS ARE IN INCHES**

INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING, ENSURE HOLES LINE-UP.

- BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-
- 6) WELDING TO BE DONE PER DART QSI 004.

FINISH:

SEE NOTES ON PAGE 2 FOR D2580-041 AND PAGE 3 FOR D2580-045

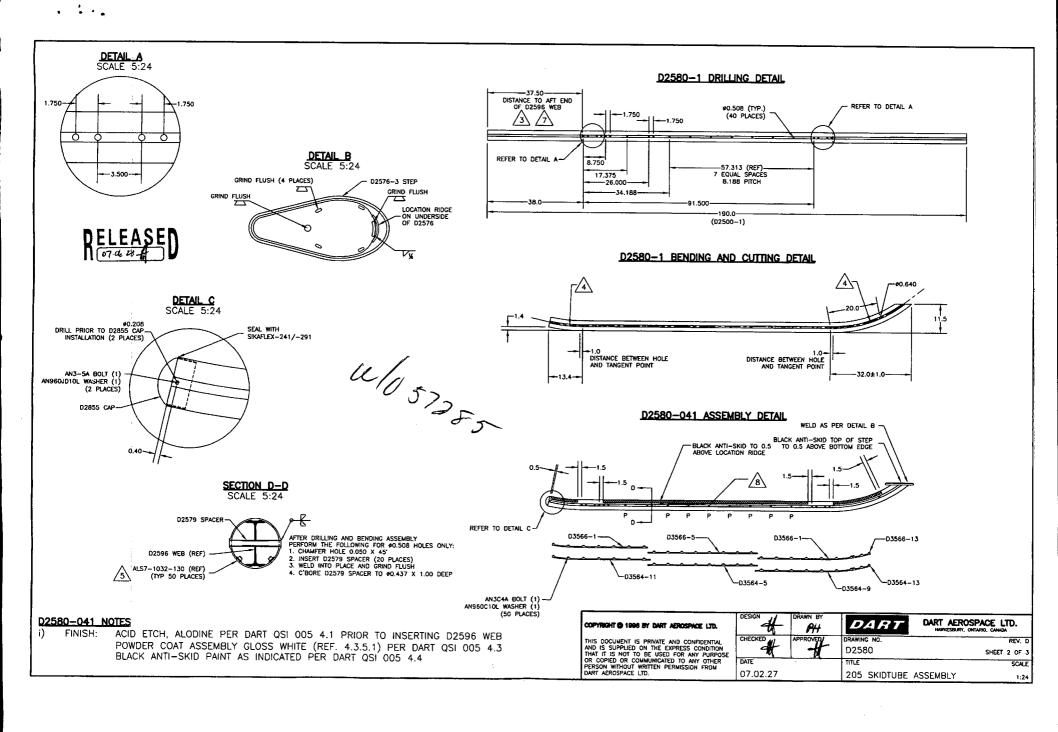
INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

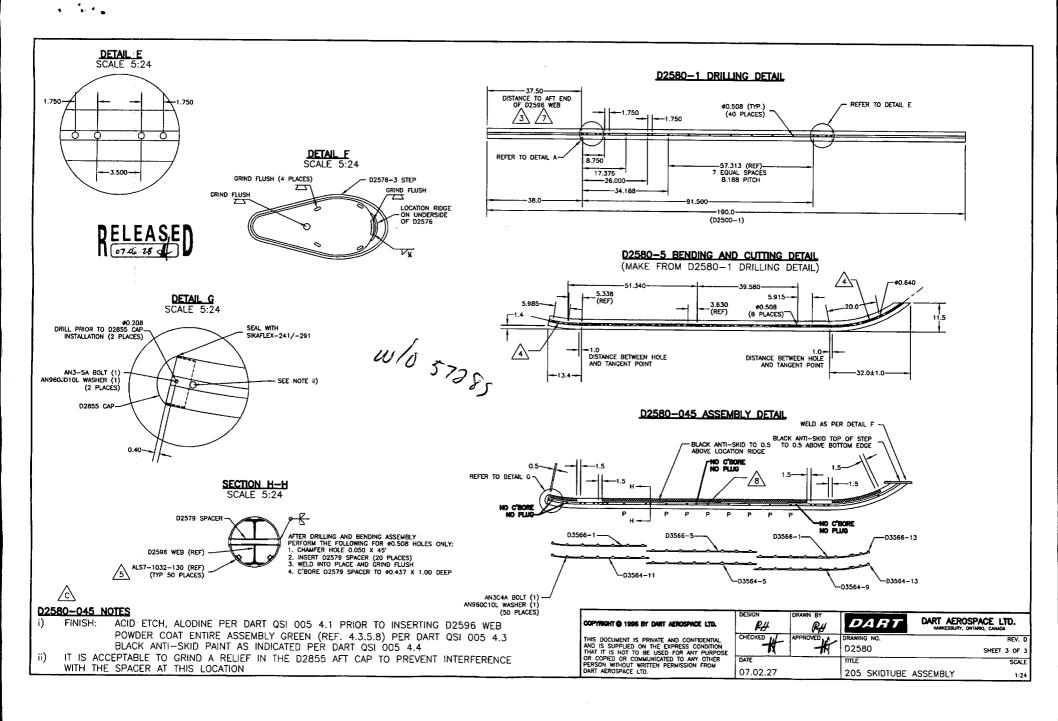
SHOP COPY **RETURN TO ENGINEERING** UNCONTROLLED COLY SUBJECT TO AMENDMEN WITHOUT NOTICE

WORK ORDER

Copyright © 1996 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.





NO. 300

AWS D17.1.2001 QUALIFICATION TEST RECORD

7 1 511
Name: Barday Elliott
Job number: <u>ちんらり</u>
Part number: 5205 - 634.041
Description: 205 skid 4-bz
Welding Process: Tig[Mig[]
Base materiel: Aluminian
Current: AC[Y DC[]

TEST REQUIREMENTS AND RESULTS

Visual: Penetration:	pass[V] pass[V]	fail[] fail[]
UNACCEPTABLE		
Cracks: Undercut: Pin holes: Overlap (cold lap) Porosity (surface): Coloration:	pass[] pass[] pass[] pass[] pass[] pass[]	fail[] fail[] fail[]
Qualifier 127 100 Welder Browland Wright	-	est Coupon 10.04.27
The above named individual is qualified in accordance with AWS D17.1.2001 to weld		